

NEWS RELEASE

DLNR ISSUES HAWAII'S FIRST GEOTHERMAL WELL PERMIT

On September 26, 1978, Hawaii's first geothermal well permit was issued to Puuwaawaa Steam Co. (Steamco) by the Department of Land and Natural Resources. The permit is the first to be issued under the Department's new geothermal regulations which went into effect on May 19, 1978.

Steamco, a Hawaii Partnership between Geothermal Exploration and Development Corp., general partner, and F. Newell Bohnett, Ltd., limited partner and owner of the west Hawaii property on which the well is to be drilled, plans to start drilling operations in October and complete the well to a depth of 6,500 feet. It is hoped that a geothermal resource can be located at that depth, but Steamco is prepared to drill deeper, to a maximum depth of 10,000 ft. if necessary.

The well permit is only for the drilling and completion of the well and if it is found to be capable of producing geothermal resources, it must be capped until additional permits and approvals are obtained for long-term testing and eventually production.

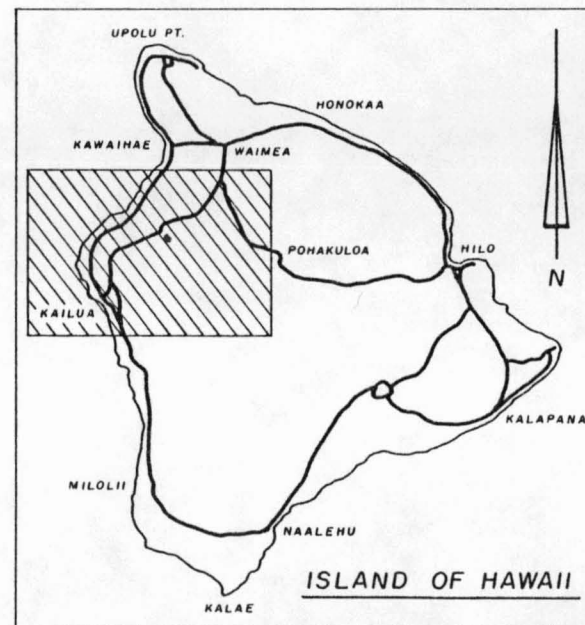
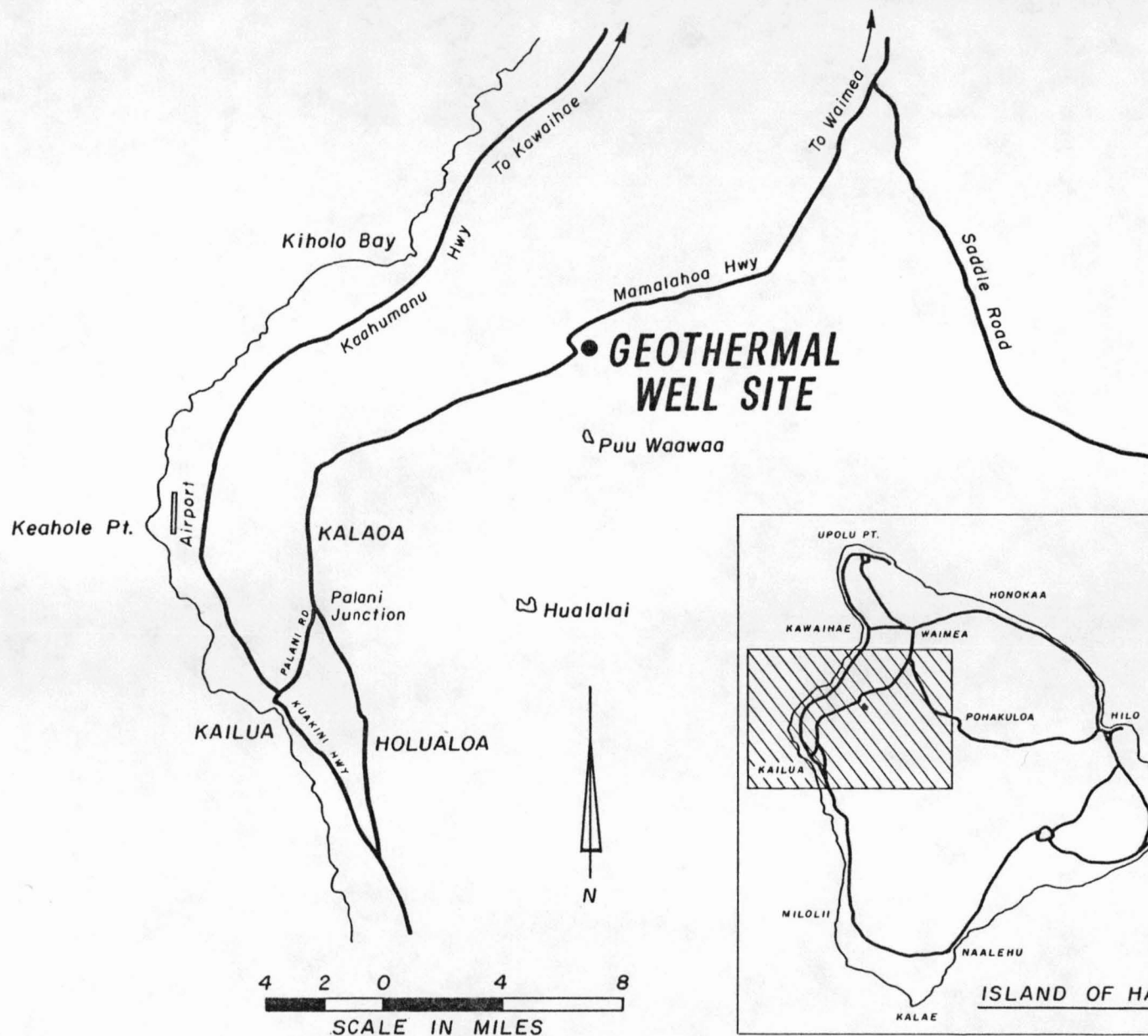
According to Steamco's application, drilling operations will be conducted in two phases. Phase one includes drilling and casing the well to a depth of 3,000 feet with subsequent open hole drilling to 6,500 feet where it is hoped that a geothermal resource will be located. Depending upon the results of phase one, additional casing would be installed to the 6,500-foot depth and the well continued to as much as 10,000 feet deep in hopes of reaching a geothermal resource.

According to William Y. Thompson, Chairman of the Board of Land and Natural Resources, the drilling activities will be inspected by the Division of Water and Land Development.

Sent to: Star Bulletin, Advertiser
West Hawaii, Hawaii Tribune
Maui News, Garden Isle News

Dave Anderson, Geo. Conf

W.Y. THOMPSON
Dept. of Land & Natural Resources
State of Hawaii
October 25, 1978



NEWS RELEASE

Department of Land & Natural Resources
February 24, 1978

STATE TO CONSIDER GEOTHERMAL REGULATIONS

The State Department of Land and Natural Resources plans to recommend the adoption of its final draft of proposed geothermal regulations governing the leasing of State-owned geothermal mineral rights and the regulation of geothermal well drilling in the State.

The recommendation will be submitted Friday, February 24, 1978, to the Board of Land and Natural Resources at its regular meeting in Honolulu.

The proposed regulations, a 40-page document, is based on Chapter 182 of the Hawaii Revised Statutes entitled, "Reservation and Disposition of Government Mineral Rights". Chapter 182 was amended by the Legislature in 1974 to include geothermal resources in its definition of a "mineral". Public hearings to receive testimony and comments on the proposed regulations were held twice in all counties of the State--in May 1976 and June 1977. All comments which were of a constructive nature and in the best interest of the State were incorporated into the final draft.

The proposed regulations spell out in considerable detail the term and conditions of all geothermal leases to be issued by the State. The conditions are stipulated to insure the orderly development of Hawaii's geothermal resources without undesirable over-speculation and abuse of the environment by developers. Every geothermal lease will be limited to a 65-year term. However, to prevent speculation, the lessee must complete one or more wells producing or capable of producing geothermal resources within the first ten years of the lease period or risk termination of his lease. More stringent is the requirement that the lessee start his geothermal exploration or drilling operations within three years from the date of the lease.

Geothermal leases on State lands are granted only by competitive bidding at public auction, but leases on other lands in which the State has reserved geothermal rights may be granted either by competitive bidding or without public auction if approved by two-thirds of the Land Board. Bidders at public auction for a geothermal lease must bid on the annual rental to be paid to the State for each acre under lease. In other states and Federal leases, the minimum annual rental is \$1.00 per acre per year. The State will also collect a royalty for all geothermal resources produced under a lease. The proposed regulations sets the minimum rate of royalty at 10% and the maximum rate at 20% of the value of geothermal resources produced. Royalty is fixed for the first 35 years of a lease, but the Board can readjust the rate within the 10 to 20 percent range in the 35th and 50th year of the lease.

In preparation for more than a year-and-a-half, the final draft of the proposed regulations is the result of much constructive input from the community, other government agencies, landowners, and geothermal companies. The regulations of other states and the Federal government were also carefully studied for their best features.

Upon adoption, the proposed regulations provide that all geothermal wells drilled, operated and maintained in the State will be regulated by the Department of Land and Natural Resources to protect public safety and health, as well as prevent waste of geothermal resources and degradation of the environment and other natural resources.

The drilling of every geothermal well will require a permit from the Department and will be strictly regulated to prevent any hazardous condition. Blowout prevention equipment will be required on all wells similar to oil wells to control any accidental blowout and any well found to be non-productive or of no further use must be properly plugged with cement before it is abandoned. To insure this, the State will require a surety bond throughout the life of any geothermal well.

Before any drilling permit is issued by the department, the well operator must satisfy all requirements of state and county planning, zoning, health, and building ordinances as well as the rules and regulations of the State's Environmental Quality Commission.

A great deal of effort has gone into the drafting of the proposed regulations which appears to be well-balanced between encouraging possible geothermal industry in Hawaii and providing the necessary regulatory authority to safeguard the public safety, health, environment and other natural resources.

The adoption of geothermal regulations is a necessary first-step toward the development of Hawaii's geothermal resources because geothermal companies would otherwise be reluctant to invest high-risk capital for geothermal exploration and development without regulations being first established by the State.

NEWS RELEASE

Department of Land & Natural Resources
Div. of Water & Land Development
November 3, 1977

STATE TO CONSIDER GEOTHERMAL REGULATIONS

The State Department of Land and Natural Resources plans to recommend the adoption of its final draft of proposed geothermal regulations governing the leasing of State-owned geothermal mineral rights and the regulation of geothermal well drilling in the State.

The recommendation will be submitted Friday, November 10, 1977, to the Board of Land and Natural Resources at its regular meeting in Honolulu.

The proposed regulations, a 40-page document, is based on Chapter 182 of the Hawaii Revised Statutes entitled, "Reservation and Disposition of Government Mineral Rights". Chapter 182 was amended by the Legislature in 1974 to include geothermal resources in its definition of a "mineral". Public hearings to receive testimony and comments on the proposed regulations were held twice in all counties of the State--in May 1976 and June 1977. All comments which were of a constructive nature and in the best interest of the State were incorporated into the final draft.

The proposed regulations spell out in considerable detail the term and conditions of all geothermal leases to be issued by the State. The conditions are stipulated to insure the orderly development of Hawaii's geothermal resources without undesirable over-speculation and abuse of the environment by developers. Every geothermal lease will be limited to a 65-year term. However, to prevent speculation, the lessee must complete one or more wells producing or capable of producing geothermal resources within the first ten years of the lease period or risk termination of his lease. More stringent is the requirement that the lessee start his geothermal exploration or drilling operations within three years from the date of the lease.

Geothermal leases on State lands are granted only by competitive bidding at public auction, but leases on other lands in which the State has reserved geothermal rights may be granted either by competitive bidding or without public auction if approved by two-thirds of the Land Board. Bidders at public auction for a geothermal lease must bid on the annual rental to be paid to the State for each acre under lease. In other states and Federal leases, the minimum annual rental is \$1.00 per acre per year. The State will also collect a royalty for all geothermal resources produced under a lease. The proposed regulations sets the minimum rate of royalty at 10% and the maximum rate at 20% of the value of geothermal resources produced. Royalty is fixed for the first 35 years of a lease, but the Board can readjust the rate within the 10 to 20 percent range in the 35th and 50th year of the lease.

In preparation for more than a year-and-a-half, the final draft of the proposed regulations is the result of much constructive input from the community, other government agencies, and geothermal companies on the mainland. The regulations of other states and the Federal government were also carefully studied for their best features.

Upon adoption, the proposed regulations provide that all geothermal wells drilled, operated and maintained in the State will be regulated by the Department Land and Natural Resources to protect public safety and health, as well as prevent waste of geothermal resources and degradation of the environment and other natural resources.

The drilling of every geothermal well will require a permit from the Department and will be strictly regulated to prevent any hazardous condition. Blowout prevention equipment will be required on all wells similar to oil wells to control any additional blowout and any well found to be non-productive or of no further use must be properly plugged with cement before it is abandoned. To insure this, the State will require a surety bond throughout the life of any geothermal well.

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